

# Managing intrafamilial maltreatment in psychiatric clinical care: Insights from an Italian adolescent cohort

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**Abstract.** *Background and aim:* Childhood Maltreatment is a leading cause of psychopathology, yet it is often neglected in the psychiatric clinical practice. The aim of the present study was to assess the frequency of childhood maltreatment in an Italian cohort of teenagers with psychiatric conditions and its impact on single disorders. *Methods:* a retrospective analysis was conducted on the medical records of 172 patients referring to a child psychiatry unit, identifying childhood maltreatment events through questionnaires, personal data, and psychiatric history, and gathering socio-demographic information and mean scores at tests assessing depression, anxiety, emotional dysregulation, and impulsivity. *Results:* 32% of the sample reported exposure to child maltreatment. Exposed children showed statistically significant higher rates of clinical severity, i.e., they were more frequently admitted as inpatients and under pharmacological therapy. Children of families under social service protection, with divorced parents, and a history of psychiatric diseases or substance abuse, showed significantly increased odds of exposure. Noticeably, socioeconomic status was not a significant factor. *Conclusions:* Childhood maltreatment is common among high-risk teenagers and dramatically impacts psychiatric conditions. Therefore, it should be routinely assessed and considered in the psychiatric care plan. ([www.actabiomedica.it](http://www.actabiomedica.it))

**Key words:** childhood maltreatment, trauma, adolescence, child psychiatry

## Introduction

Every clinician in the field of mental health knows that no child or adolescent can be treated without taking into account the familiar and social environment he or she comes from, which represents the first ally in the care plan. When it comes to experiences of maltreatment reported by minors, especially if intrafamilial, that alliance is deeply put at risk; for clinicians, the challenge of finding adequate contexts and actions of care begins, and feelings of loss and doubt can arise.

Child maltreatment (CM) is defined as “all forms of physical and/or emotional ill-treatment, sexual abuse, neglect, negligent treatment, and commercial or other exploitations that result in actual or potential

harm to a child’s health, development or dignity” (1). Official reports on child abuse do not cover the vastness of the phenomenon, often referred as “the hidden epidemic” (2). CM is supposed to interest 1 out of 3 children worldwide (3), although only 5% of exposed children are under social service protection (4).

Among psychiatric patients, victimization rates are higher than in the general population (5) and the subjective referral of previous abuse has a robust relationship with the subsequent development of a psychopathology (6,7). Exposure to CM has significant consequences on health (8,9), a deep detrimental impact on mental health (3) and will influence child development in every domain (10). Stress-related neurobiological responses and epigenetic modifications

alter the developing brain and mediate dysfunctional behaviors which lead to psychopathology (11).

The consequences of CM in individuals' psychological development can be recognized in pre-school age and during adolescence (12), because the earlier the trauma exposure, the worse will be the consequences (13). A time-dependent sensitivity to different types of maltreatment has been speculated (14). When abused during childhood, psychiatric subsequent diseases will be more severe and psychosocial impairment greater, within a longer course of the disease (15), independently from the underneath diagnosis (16) and the number of comorbidities (17).

In teenagers, maltreatment is responsible for 45% of early-onset psychiatric disorders (12), is strongly connected to depression (18), and increases the probability of suicidal thoughts by 2.5 times (19).

Evidence about psychiatric impairment after maltreatment exposure has not yet successfully entered clinical practice: the Diagnostic and statistical manual of mental disorders, 5th Edition (20) does not provide an adequate diagnosis or specifiers, the proposal of a "Traumatic developmental disorder" is under discussion (21) and it might help in acknowledging the critical role of CM in the psychiatric diagnostic process (22).

To the best of our knowledge, data about the frequency of CM and its correlations with sociodemographic and clinical factors among the Italian children and adolescent psychiatric population are not available. This research is part of a collaborative project between an Italian University and the Association "Telefono Rosa" aiming to study the consequences of CM and increase healthcare practitioners' awareness on this topic. Therefore, the aim of the present study was to provide data from a clinical sample to test the hypothesis that: (a) CM experiences are still underestimated in the diagnostic and therapeutic process; (b) they could have a close relationship with the severity of the psychiatric symptoms; (c) sociodemographic factors can guide clinicians to identify at risk children.

## Patients and methods

A retrospective analysis based on clinical charts was conducted. The total sample has been collected among

patients referring to the child psychiatry unit of an urban Italian University-Hospital, from January 2019 to December 2020. The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

The inclusion criteria were: (a) first access to the clinic between January 2019 and December 2020, (b) age between 13 and 18 years, and (c) diagnosis after clinicians' evaluation corresponding to an internalizing or externalizing disorder, as conceptualized by Achenbach (1966) (23). Recommendations by Achenbach et al. 2016 (24) have been followed, and the International Classification of Diseases, 9th revision (ICD9) (25) used to categorize disorders (Table 1).

The exclusion criteria were: (a) intellectual disability (ID), i.e., IQ <70, (b) final diagnosis within the schizophrenic spectrum. This choice has been motivated by the need to use self-reports and self-informants, less liable when ID or schizophrenic spectrum disorders are present (26), and (c) lack of documents available in the chart (minimum required documentation were familiar information and discharge letter, which includes anamnesis, clinical evaluation, diagnosis, therapy plan).

If any other comorbid diseases were present, the patient was not excluded if presenting a diagnosis from Table 1 as the main reason for referral. According to these criteria, the patient has been enrolled using the diagnosis included in the "hospital discharge schedule" ("SDO"), which represents the official and computerized register of diagnosis for epidemiological studies adopted by the

**Table 1.** List of diagnostic codes from ICD9 for the subdivision of patients' diagnosis into internalizing or externalizing

DIAGNOSTIC CODES	
Externalizing	Internalizing
3093	30928
312	3090
313.8	30924
312.30	3098
314	296
	300
	3098

Italian health system. Clinical data available in the hospital's informatic system were then collected.

A written informant consent was present in the clinical chart for all the patients, allowing data collection for research purposes.

The definition of CM provided by the World Health Organization (WHO) (1) was used to identify cases. The several types of CM were classified according to the Maltreatment classification system (MCS) (27), which recognizes physical abuse, psychological abuse, sexual abuse and neglect. Furthermore, domestic violence (28) was taken into account, while any other forms of non-interpersonal trauma, such as natural disasters, diseases, accidents, etc. were not considered.

Subjects were identified through three possible methods non-mutually exclusive:

1. answer to the questionnaire “Inventario degli eventi stressanti e traumatici della vita” (29), in particular questions n. 12 and n. 15; this questionnaire is the Italian version of the “Life Stressor Checklist – Revised” (30). It proposes a 5-point Likert scale asking the patients if they are involved in forms of maltreatment, which type, at which age, and to define the subsequent impairments.
2. information depicted through clinical interviews with patients or parents and reported in the chart.
3. formal documentation provided by the Court or the Community Services.

Each subject was enrolled only if written information referring to the experience of maltreatment was present either in the clinical discharging letter, in the questionnaire “Inventario degli eventi stressanti e traumatici della vita” or in an official document present in the chart.

For each patient, sociodemographic, clinical, and psychometric data were extracted from the Hospital database.

Sociodemographic data were collected through interviews to parents or other caregivers. We recorded: age, sex, nationality, divorce or separation of parents, age of parents, socioeconomic status of each parent and their mean, as synthesized by the Hollingshead

index (31), presence of parents or other family components with psychiatric disorders, history of substance abuse in the family, previous referral to social services.

Hollingshead - Index of Social Position (H-ISP) was indicated and the average score between the two parents was considered (31).

The clinical data collected were final diagnosis, type of care (inpatient or outpatient service), diagnosis at the first admission and drug therapy in progress. The diagnoses were divided into internalizing and externalizing (23) and analyzed as a dichotomic variable. Only 2 subjects presented an overlap, therefore only the principal diagnosis was considered.

The psychometric data were represented by mean scores reported by patients in self-report questionnaires investigating depression, anxiety, emotional dysregulation and impulsivity in the following scales:

- Children's Depression Inventory 2 (CDI 2) (32);
- Multidimensional Anxiety Scale for Children (MASC 2) (33);
- Barratt Impulsiveness Scale 11 (BIS-11) (34);
- The Difficulties in Emotion Regulation Strategies (DERS) (35).

### *Statistical analysis*

Statistical analysis was conducted using the IBM SPSS Statistics software version 22.0 (IBM Corp, Armonk, NY, USA). For statistical purposes, we divided the sample between exposed and non-exposed patients and a frequency analysis of all the variables was reported. The student's t-test for continuous variables and the  $\chi^2$  test for nominal data were used. Mann-Whitney's test was used to compare economic status and psychometric measures. After that, we conducted a logistic regression analysis. A p-value of < 0.01 represented statistical significance for all tests.

## **Results**

Among 229 patients initially considered, 57 subjects were eliminated due to a lack of available documentation in the clinical chart.

Therefore, the final sample consisted of 172 youths (124 females), with a mean age of 15.3 years (Table 2).

Overall, 56 out of 172 (32%) resulted positive for CM. In exposed patients, domestic violence resulted in the most frequent form (63.8%), followed by psychological maltreatment (48.3%) and physical maltreatment (25.9%). Sexual abuse was declared by only 3 patients (5.2%) (Figure 1).

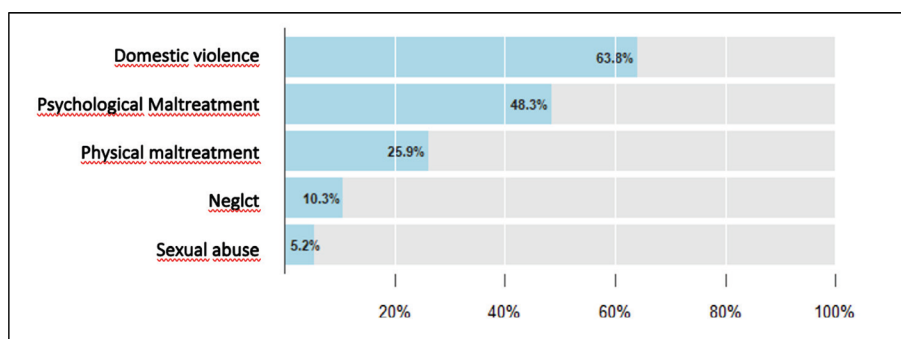
In 25 out of 58 cases (43,1%) several types of maltreatment coexisted: 33,7% were exposed to two types and 10,3% to three types of maltreatment. The most common combination was psychological maltreatment + domestic violence (15.5% of the total), followed by psychological maltreatment + physical abuse (13.8%).

In 76% of the cohort, the patient himself declared experience of maltreatment, in 15% was the mother's disclosure, and in 9% healthcare practitioners or official reports discovered the maltreatment (Table 3). The "Inventario degli eventi stressanti e traumatici della vita" was administered to 58 patients, out of which 30 resulted in a positive answer to questions n.12 or 15 (Table 2).

Among sociodemographic data, the following were significantly more common in the exposed group: having divorced parents, being known by community services, and having a positive family history of psychiatric diseases or substance abuse (Table 2). Social and economic status showed a lower trend among exposed families ( $p = 0.09$ ) (Figure 2).

**Table 2.** Comparison of exposed and non-exposed children for each variable. Significant P value is indicated in bold

SOCIODEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF THE SAMPLE				
N. (%)				
	Total	Non-exposed	Exposed	p value
SAMPLE	172	116	56 (32)	-
SOCIODEMOGRAPHIC VARIABLES				
AGE	15,3	15,4	15,3	-
SEX N. OF GIRLS	124 (72)	81 (69)	43(79)	<b>.25</b>
NATIONALITY N. OF CHILDREN BORN ABROAD	22 (12)	14 (11.4)	8 (15.8)	<b>.57</b>
LACK OF SECOND PARENT	10 (5)	2 (5.6)	8 (12.7)	<b>0.20</b>
DIVORCE	62 (36)	30 (27)	32 (60)	<0.01
MATHER'S AGE	48	48,3	46.9	<b>.36</b>
FATHER'S AGE	51	52.5	51.4	<b>.37</b>
PSYCHIATRIC DISEASE AFFECTING THE MOTHER	38 (22)	24 (24.5)	14 (26.4)	<b>.95</b>
PSYCHIATRIC DISEASE AFFECTING THE FATHER	19 (11)	8 (8.7)	11 (24.5)	<b>.02</b>
PSYCHIATRIC DISEASE IN THE FAMILY	39 (22)	17 (15.9)	22 (43.1)	<0.01
SUBSTANCE ABUSE IN THE FAMILY	21 (12)	10 (9.3)	11 (23.1)	<0.01
SOCIAL SERVICE	20 (11)	5 (4.7)	15 (24.4)	<0.01
CLINICAL VARIABLES				
INTERNALIZING DISEASE	119 (70)	77 (66)	42 (75)	<b>.63</b>
EXTERNALIZING DISEASE	31 (18)	18 (15)	13 (23)	
INPATIENTS	85 (50)	40 (34)	43 (80)	<0.01
OUTPATIENTS	87 (50)	74 (85)	13 (15)	
PSYCHOPHARMACOLOGICAL THERAPY	90 (52)	41 (35)	39 (69)	<0.01
BEING ADMINISTRED THE QUESTIONNAIRE "INVENTARIO DEGLI EVENTI (...)"	<b>58 (33)</b>	<b>20 (17)</b>	<b>30 (53)</b>	<0.01



**Figure 1.** Types and frequency of reported maltreatment experiences.

**Table 3.** Source of disclosure.

SOURCE OF DISCLOSURE N (%)		
<b>TOTAL</b>		<b>58</b>
SELF REPORT	Total	44 (76)
	Clinical interview	14 (24)
	Answer to questionnaire	30 (51)
PARENT'S REPORT	Total	9 (58)
	Mother's	9 (58)
	Father's	0
OFFICIAL DOCUMENTS	Total	5 (9)

Clinical variables showed higher severity of psychopathology among exposed children, they were more frequently admitted as inpatients and more often under pharmacological therapy (Table 2). The psychometric data highlighted that the exposed children reported higher scores as follow: of the seven subscales on the CDI 2, two (Negative Self-Esteem and Negative Mood) showed differences between non-exposed and exposed children. Of the eleven subscales of the MASC 2, four (Obsessions and Compulsion, Physical Symptoms, Panic and Restlessness) showed differences between non-exposed and exposed children (Table 4).

A logistic regression analysis was performed to find which sociodemographic variables influenced the likelihood of exposition. A positive family history of psychiatric diseases and parents' divorce were the two variables that increased by 3 times the odds of being exposed to any form of child abuse (Table 5). Domestic violence was more common in families with a history

of divorce (OR 4.62) or with a positive anamnesis for psychiatric disease (OR 3.79) (Table 5). There was a high risk of physical abuse in families with a history of substance abuse (OR 16.02) (Table 5).

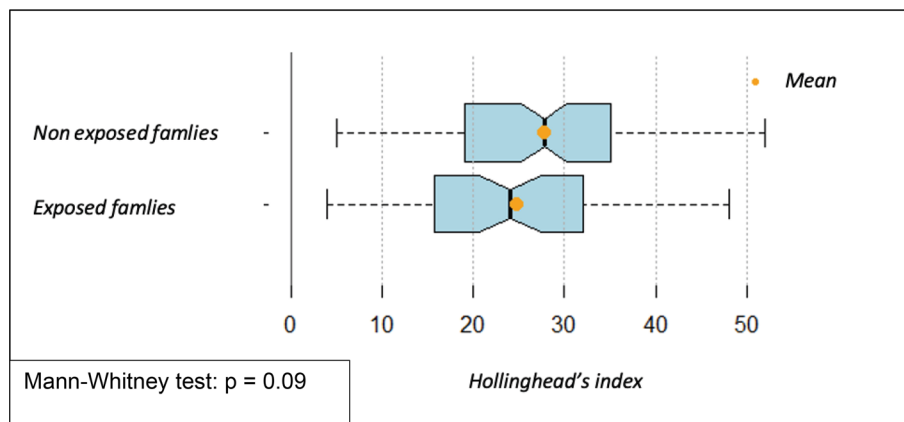
## Discussion

Our investigation provides a new insight on the complex topic of managing intrafamilial maltreatment within psychiatric clinical care. To the best of our knowledge, our data are the first available on an Italian cohort of adolescents and one of the few available on youths from psychiatric services. While large cohorts have been studied among general populations (36), or in the context of epidemiological studies, a minor number of studies on the topic of maltreatment take a clinical perspective.

Our results show a high incidence of self-reported CM among psychiatric teenagers and a positive relationship with the severity of the psychiatric disorders.

Through the review of clinical documents, we have found that as much as 32% of our sample was exposed to childhood maltreatment, with a high incidence of domestic violence (63.8%) and psychological maltreatment (48.3%); physical maltreatment (25.9%) and sexual abuse were less represented (5.2%). In other words, one in every three patients in psychiatric clinical care for adolescents will potentially report being a victim of abuse within their own family.

Previous retrospective investigations found an exposure rate of 47% for physical abuse and 33% for sexual abuse among inpatients and 11% for physical



**Figure 2.** Socioeconomic status summed in Hollinghead's index with a comparison between exposed and non-exposed families.

abuse, 11% for sexual abuse and 34% for domestic violence among outpatients (16), with poly-victimization representing 8% of the sample. Greger and colleagues found 39% of a sample from a high-risk adolescent population reported family violence experiences (17). In a Spanish sample of adolescents in care at residential facilities, as much as 84% of the sample resulted positive for victimization experiences (37). Considering that our sample analyzed both inpatients and outpatients, we can claim that the results are consistent with previous reports.

Our sample is characterized by a high number of females (72%), which is consistent with the demographic trend of access to our clinic, and we do not attribute this to any other potential selection biases. However, it is known that girls are more likely to be exposed to childhood maltreatment (38), therefore the number of females in our sample might have acted as a confounding factor.

Rates of disclosure of sexual abuse have been reported up to 28.5% in studies with similar clinical populations, while it resulted lower in our sample (5.2%). Since sexual abuse often overlaps with other forms of maltreatment, it might have not been distinguished in our data collection, mainly based on spontaneous declarations and retrospective analysis. However, this data might also reflect the need for a stronger connection between health care practitioners and social services, to avoid reticence in recording data with significant legal consequences.

Only 9% of the exposed sample had an official report from social services or other agencies. Official data available on the Italian population estimate a prevalence of exposure to CM of 9 out of 1000 among minors in the country (39). The discrepancy between data derived by official agencies and subjective reports of maltreatment is known (4); especially for teenagers a high risk of underestimating maltreatment has been reported (40). When directly interviewed, American teenagers from the community sample showed rates of maltreatment as much as 38.1% (41), while parents-communicated experience resulted in only 15.2%. The discrepancy between self-report measures and official reports opens up the problem of the reliability of declarations based on self-memories on the topic of abuse and the problem of the "recall bias" (9).

Taking into account the source of informants in our sample, we can claim that having administered a questionnaire with specific questions amplified the number of disclosures: out of 58 cases positive for CM, 30 cases (51%) had received the questionnaire.

Many interviews are available to assess exposure to victimization (42), and attempts have been made to uniform them in order to collect more uniform data (43); however, at the best of our knowledge not experiences have been reported within clinical setting, so that the validity of using specific tools for investigating experiences of CM among psychiatric adolescents inpatients need to be further analyzed.

**Table 4.** Psychometric data in exposed and non-exposed children. Significant P values were reported in bold

PSYCHOMETRIC EVALUATION				
QUESTIONNAIRE	SUBSCALE	Non-exposed	Exposed	P Value
CDI 2	Total score	61.8	68.1	0.019
	Emotional probl	59.7	67.1	0
	Negative mood/ Physical symptoms	58.7	67.1	<b>&lt;0.01</b>
	Negative Self.Esteem	60.7	68.3	<b>&lt;0.01</b>
	Functional problems	67.3	73.7	0.038
	Ineffectiveness	61	67.7	0.016
	Interpersonal problems	62.2	66.8	0.15
MASC 2	Total score	70.7	75.3	0.14
	Separation Anxiety/Phobias	59.1	57.7	0.72
	Genal anxiety index	59	66.4	0.02
	Social anxiety total	59	62.5	0.16
	Humiliation/rejection	56.1	60.8	0.09
	Performance fear	58.3	61.5	0.27
	Obsessions and compulsion	55.5	62.5	<b>&lt;0.01</b>
	Physical symptoms total score	62.7	69.9	<b>&lt;0.01</b>
	Panic	59.9	67.2	<b>&lt;0.01</b>
	Tense/Restless	61.1	68.3	<b>&lt;0.01</b>
	Harm avoidance	49.1	50.7	0.45
DERS	Nonacceptance of emotional responses	17.8	19.8	0.05
	Difficulty engaging in goal-directed behaviour	17.8	19.1	0.17
	Impulse control difficulties	16.3	19.5	0.05
	Lack of emotional awareness	19	19.4	0.67
	Limited access to emotion regulation strategies	23.2	27.7	0.06
	Lack of emotional clarity	14	15.8	0.18
BIS	Total score	67.7	69.5	0.31
	Attentional impulsiveness	18.2	19.6	0.22
	Motor impulsiveness	20.3	23.2	0.08
	Non-planning impulsiveness	30	30.4	0.54

The subjective experience of trauma and objective experience is often not coincident 6); indeed, when comparing retrospective and prospective investigation, correlation results weak among both adults and adolescents (44). However, the best predictive values on subsequent psychopathology are represented by self-reports (6,45).

In our sample, being exposed to CM showed increased severity of the disease; exposed patients were more commonly admitted as inpatients, needed

pharmacotherapy more often, and showed higher scores in specific subscales of questionnaires on anxiety and depression. We might consider that being an inpatient facilitates the process of self-disclosure, as patients are in a safe place and have close contact with health-care practitioners.

Our data provide evidence that sociodemographic variables can act as a guide to identify at-risk patients; many previous studies have looked at the association of sociodemographic factors and child maltreatment (46),

**Table 5.** Logit regression models. OR, odds ration. SD, standard deviation. SES, socioeconomic status. In bold  $p < 0.01$

<b>LOGISTIC REGRESSION</b>																
<i>Type of exposure condition</i>	Child maltreatment exposition			Domestic violence			Psychological maltreatment			Physical maltreatment						
	OR	SD	z	P> z	OR	SD	z	P> z	OR	SD	z	P> z	OR	SD	z	P> z
<i>Sociodemographic condition</i>																
<i>Sex</i>	1.71	0.8	1.144	0.253	1.97	1.12	1.20	0.228	1.13	0.58	0.24	0.811	9.61	11.87	1.83	0.067
<i>Divorced parents</i>	<b>3.27</b>	1.34	2.899	<b>0.004</b>	<b>4.62</b>	2.21	3.2	<b>0.001</b>	1.24	0.59	0.451	0.652	2.01	1.59	0.88	0.377
<i>Psychiatric diseases within family</i>	<b>3.49</b>	1.55	2.812	<b>0.005</b>	<b>3.79</b>	1.84	2.75	<b>0.006</b>	2.94	1.43	2.213	0.027	2.84	2.23	1.33	0.184
<i>Substance abuse within family</i>	2.07	1.22	1.235	0.217	2.44	1.48	1.47	0.142	1.15	0.72	0.221	0.825	<b>16.02</b>	12.91	3.44	<b>0.001</b>
<i>SES</i>	0.99	0.018	0.443	0.658	0.98	0.022	0.83	0.404	0.99	0.02	-0.46	0.646	0.96	0.04	-1.07	0.286



which we verify in our population, given the specific characteristics. Coherently with previous studies, having divorced parents or a family with a history of psychiatric disease increased the odds of child maltreatment in general; a positive family history of substance abuse increased the odds of physical maltreatment by 16 times. Noticeably, socioeconomic status did not increase the odds of CM in our cohort, which results in a difference from studies on general population.

It appears that we need to consider trauma, and intrafamilial CM in particular, as a piece of information that will influence the clinical course of the disease (47); in other words, a “trauma-informed” psychodiagnostics evaluation is suggested (48). The American Academy of Pediatrics has recently positively commented on trauma-informed care (48,49). Physicians can act as a form of secondary prevention, when the stress response is still changeable (50). Substantial collaboration with associations working in the protection of maltreatment victims’ field, like the one conducted between the Association “Telefono Rosa” and our university, are valuable initiatives to facilitate more effective detection of abuse and more appropriate intervention strategies.

The study’s main limitation is the retrospective design, which decreases the quality of information as only some patients received the same psychodiagnostics evaluation. This has led to a statistical analysis in which the total number of the sample might vary according to the available data. However, the patient was excluded when data was too scarce or ambiguous.

Another limitation can be identified in the lack of details about the exposure (frequency, severity, age at first exposure), which could be an important variable to evaluate the potential close relationship between CM and its psychopathologic consequences (15).

We acknowledge two main possible confounding factors in our data set: the high number of females in the sample and the uneven use of the questionnaire with specific questions about CM.

Furthermore, it should be considered that this study is related to a clinical population of a third-level psychiatric service in a metropolitan city, therefore the clinical severity of our patients in terms of psychiatric condition and sociodemographic data could not be representative of other Italian environments.

## Conclusions

In our sample, CM has been reported by one out of three among a cohort of teenagers with psychiatric internalizing and externalizing disorders. The exposure rate appears way more common than in the general population, as indicated by data available through official agencies in Italy. domestic and psychological violence is the most reported, followed by physical maltreatment. Poly-victimization was commonly reported. Exposed children showed a more severe course of pathology, increased need for hospitalization and use of pharmaceutical therapies with a higher score for depression and anxiety, especially in the subscales related to physical symptoms. The logistic regression analysis has shown that familial factors can be identified as increasing the odds of maltreatment exposure, particularly divorce, a psychiatric or addiction history in the family. Our findings underline that CM is a common phenomenon in the high-risk adolescent psychiatric population and influences the course of symptoms. We therefor provide robust evidence towards the idea that assessment for the subjective experience of abuse needs to enter clinical practice, especially in psychiatric care (22).

**Conflict of Interest:** Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

**Authors Contribution:** The authors confirm contribution to the paper as follows: study conception and design: AT, MF, MR, CS, FP; data collection: EA, MA, ND, VZ; analysis and interpretation of results: EA, AT, MR, VZ; draft manuscript preparation: MA, ND, VZ. All authors reviewed the results and approved the final version of the manuscript.

## References

1. Butchart, A., World Health Organization, International Society for the Prevention of Child Abuse and Neglect. Preventing child maltreatment: A guide to taking action and generating evidence. World Health Organization. 2006.
2. Lanius, R. A., Vermetten, E., Pain, C. The impact of early life trauma on health and disease: The hidden epidemic. Cambridge University Press. 2010.

3. Chandan JS, Thomas T, Gokhale KM, Bandyopadhyay S, Taylor J, Nirantharakumar K. The burden of mental ill health associated with childhood maltreatment in the UK, using The Health Improvement Network database: a population-based retrospective cohort study. *Lancet Psychiatry*. 2019 Nov;6(11):926-934. doi: 10.1016/S2215-0366(19)30369-4.
4. MacMillan HL, Jamieson E, Walsh CA. Reported contact with child protection services among those reporting child physical and sexual abuse: results from a community survey. *Child Abuse Negl*. 2003 Dec;27(12):1397-408. doi: 10.1016/j.chiabu.2003.06.003.
5. Struck N, Krug A, Yuksel D, et al. Childhood maltreatment and adult mental disorders: The prevalence of different types of maltreatment and associations with age of onset and severity of symptoms. *Psychiatry Res*. 2020 Nov;293:113398. doi: 10.1016/j.psychres.2020.113398.
6. Danese A, Widom CS. The Subjective Experience of Childhood Maltreatment in Psychopathology. *JAMA Psychiatry*. 2021 Dec 1;78(12):1307-1308. doi: 10.1001/jamapsychiatry.2021.2874.
7. Green JG, McLaughlin KA, Berglund PA, et al. Childhood adversities and adult psychiatric disorders in the national comorbidity survey replication I: Associations with first onset of DSM-IV disorders. *Arch Gen Psychiatry*. 2010 Feb;67(2):113-23. doi: 10.1001/archgenpsychiatry.2009.186.
8. Scott J, Varghese D, McGrath J. As the twig is bent, the tree inclines: adult mental health consequences of childhood adversity. *Arch Gen Psychiatry*. 2010 Feb;67(2):111-2. doi: 10.1001/archgenpsychiatry.2009.188.
9. Sedgwick, P. What is recall bias? *BMJ*. 2012;344(23), 3519-3520. doi: 10.1136/bmj.e3519.
10. Zeanah CH, Humphreys KL. Child Abuse and Neglect. *J Am Acad Child Adolesc Psychiatry*. 2018 Sep;57(9):637-644. doi: 10.1016/j.jaac.2018.06.007.
11. Kaufman, J., & Weder, N. Neurobiology of Early Life Stress: Evolving Concepts. In A. Martin, L. Scahill, & C. Kratochvil (Eds.), *Pediatr Psychopharmacol*. 2010;pp. 112-123. Oxford University Press. doi:10.1093/med/9780195398212.003.0008.
12. McLaughlin KA, Greif Green J, Gruber MJ, Sampson NA, Zaslavsky AM, Kessler RC. Childhood adversities and first onset of psychiatric disorders in a national sample of US adolescents. *Arch Gen Psychiatry*. 2012 Nov;69(11):1151-60. doi: 10.1001/archgenpsychiatry.2011.2277.
13. Lippard ETC, Nemeroff CB. The Devastating Clinical Consequences of Child Abuse and Neglect: Increased Disease Vulnerability and Poor Treatment Response in Mood Disorders. *Am J Psychiatry*. 2020 Jan 1;177(1):20-36. doi: 10.1176/appi.ajp.2019.19010020.
14. Dunn EC, McLaughlin KA, Slopen N, Rosand J, Smoller JW. Developmental timing of child maltreatment and symptoms of depression and suicidal ideation in young adulthood: results from the National Longitudinal Study of Adolescent Health. *Depress Anxiety*. 2013 Oct;30(10):955-64. doi: 10.1002/da.22102.
15. Boxer P, Terranova AM. Effects of multiple maltreatment experiences among psychiatrically hospitalized youth. *Child Abuse Negl*. 2008 Jun;32(6):637-47. doi: 10.1016/j.chiabu.2008.02.003.
16. Ford JD, Wasser T, Connor DF. Identifying and determining the symptom severity associated with polyvictimization among psychiatrically impaired children in the outpatient setting. *Child Maltreat*. 2011 Aug;16(3):216-26. doi: 10.1177/1077559511406109.
17. Greger HK, Myhre AK, Lydersen S, Jozefiak T. Previous maltreatment and present mental health in a high-risk adolescent population. *Child Abuse Negl*. 2015 Jul;45:122-34. doi: 10.1016/j.chiabu.2015.05.003.
18. Vibhakar V, Allen LR, Gee B, Meiser-Stedman R. A systematic review and meta-analysis on the prevalence of depression in children and adolescents after exposure to trauma. *J Affect Disord*. 2019 Aug 1;255:77-89. doi: 10.1016/j.jad.2019.05.005.
19. Angelakis I, Austin JL, Gooding P. Association of Childhood Maltreatment With Suicide Behaviors Among Young People: A Systematic Review and Meta-analysis. *JAMA Netw Open*. 2020 Aug 3;3(8):e2012563. doi: 10.1001/jamanetworkopen.2020.12563.
20. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition)*. American Psychiatric Association. 2013. doi: 10.1176/appi.books.9780890425596
21. van der Kolk BA, Courtois CA. Editorial comments: Complex developmental trauma. *J Trauma Stress*. 2005 Oct;18(5):385-8. doi: 10.1002/jts.20046.
22. Teicher MH, Gordon JB, Nemeroff CB. Recognizing the importance of childhood maltreatment as a critical factor in psychiatric diagnoses, treatment, research, prevention, and education. *Mol Psychiatry*. 2022 Mar;27(3):1331-1338. doi: 10.1038/s41380-021-01367-9.
23. Achenbach TM. The classification of children's psychiatric symptoms: a factor-analytic study. *Psychol Monogr*. 1966;80(7):1-37. doi: 10.1037/h0093906.
24. Achenbach TM, Ivanova MY, Rescorla LA, Turner LV, Althoff RR. *Internalizing/Externalizing Problems: Review and Recommendations for Clinical and Research Applications*. *J Am Acad Child Adolesc Psychiatry*. 2016 Aug;55(8):647-56. doi: 10.1016/j.jaac.2016.05.012.
25. Medicode (Firm) (Ed.). *ICD-9-CM: International classification of diseases, 9th revision, clinical modification (5th ed)*. Medicode. 1997.
26. Finlay WM, Lyons E. Methodological issues in interviewing and using self-report questionnaires with people with mental retardation. *Psychol Assess*. 2001 Sep;13(3):319-35. doi: 10.1037//1040-3590.13.3.319.
27. Cicchetti, D. *Developmental Psychopathology: Reactions, Reflections, Projections*. *Developmental Review*. 1993; 13(4), 471-502. doi:10.1006/drev.1993.1021.
28. Breiding M, Basile KC, Smith SG, Black MC, Mahendra RR. *Intimate partner violence surveillance: Uniform definitions and recommended data elements. Version 2.0*. 2015.

29. Giannantonio, M. *Psicotraumatologia: Fondamenti e strumenti operativi* (Nuova ed. aggiornata). Centro scientifico. 2009.
30. Wolfe J, Kimerling R, Brown PJ, Chrestman KR, Levin K. Life Stressor Checklist—Revised [dataset]. American Psychological Association. 2012. doi: 10.1037/t04534-000.
31. Hollingshead AB. Two factor index of social position. Yale University Press, New Haven. 1957.
32. Kovacs, M. Children's Depression Inventory (CDI and CDI 2). In R. L. Cautin & S. O. Lilienfeld (Eds.), *The Encyclopedia of Clinical Psychology*. 2015;pp. 1–5. John Wiley & Sons, Inc. doi: 10.1002/9781118625392.wbecp419
33. March JS. *Multidimensional Anxiety Scale for Children 2nd Edition™*. 2013.
34. Fossati A, Di Ceglie A, Acquarini E, Barratt ES. Psychometric properties of an Italian version of the Barratt Impulsiveness Scale-11 (BIS-11) in nonclinical subjects. *J Clin Psychol*. 2001 Jun;57(6):815–28. doi: 10.1002/jclp.1051.
35. Gratz KL, Roemer L. Multidimensional Assessment of Emotion Regulation and Dysregulation: Development, Factor Structure, and Initial Validation of the Difficulties in Emotion Regulation Scale. *J Psychopathol Behav Assess*, 2004;26(1), 41–54. doi: 10.1023/B:JOBA.0000007455.08539.94.
36. Mills R, Scott J, Alati R, O'Callaghan M, Najman JM, Strathearn L. Child maltreatment and adolescent mental health problems in a large birth cohort. *Child Abuse Negl*. 2013 May;37(5):292–302. doi: 10.1016/j.chiabu.2012.11.008.
37. Segura A, Pereda N, Guilera G, Hamby S. Resilience and psychopathology among victimized youth in residential care. *Child Abuse Negl*. 2017 Oct;72:301–311. doi: 10.1016/j.chiabu.2017.08.019.
38. Sharratt K, Mason SJ, Kirkman G, et al. Childhood Abuse and Neglect, Exposure to Domestic Violence and Sibling Violence: Profiles and Associations With Sociodemographic Variables and Mental Health Indicators. *J Interpers Violence*. 2023 Jan;38(1-2):NP1141–NP1162. doi: 10.1177/08862605221090562.
39. AGIA, CISMAL, Terre des Hommes. *Indagine nazionale sul maltrattamento dei bambini e degli adolescenti in Italia. Risultati e prospettive*. 2021. [Italian]. Available at: [Ii-indagine-nazionale-maltrattamento-2021.pdf](https://www.garanteinfanzia.org/) (garanteinfanzia.org).
40. Gilbert R, Widom CS, Browne K, Fergusson D, Webb E, Janson S. Burden and consequences of child maltreatment in high-income countries. *Lancet*. 2009 Jan 3;373(9657):68–81. doi: 10.1016/S0140-6736(08)61706-7.
41. Finkelhor D, Turner HA, Shattuck A, Hamby SL. Prevalence of Childhood Exposure to Violence, Crime, and Abuse: Results From the National Survey of Children's Exposure to Violence. *JAMA Pediatr*. 2015 Aug;169(8):746–54. doi: 10.1001/jamapediatrics.2015.0676.
42. Prino LE, Longobardi C, Settanni M. Young Adult Retrospective Reports of Adverse Childhood Experiences: Prevalence of Physical, Emotional, and Sexual Abuse in Italy. *Arch Sex Behav*. 2018 Aug;47(6):1769–1778. doi: 10.1007/s10508-018-1154-2.
43. Runyan DK, Dunne MP, Zolotor AJ, et al. The development and piloting of the ISPCAN Child Abuse Screening Tool-Parent version (ICAST-P). *Child Abuse Negl*. 2009 Nov;33(11):826–32. doi: 10.1016/j.chiabu.2009.09.006.
44. Baldwin JR, Reuben A, Newbury JB, Danese A. Agreement Between Prospective and Retrospective Measures of Childhood Maltreatment: A Systematic Review and Meta-analysis. *JAMA Psychiatry*. 2019 Jun 1;76(6):584–593. doi: 10.1001/jamapsychiatry.2019.0097.
45. Everson MD, Smith JB, Hussey JM, et al. Concordance between adolescent reports of childhood abuse and Child Protective Service determinations in an at-risk sample of young adolescents. *Child Maltreat*. 2008 Feb;13(1):14–26. doi: 10.1177/1077559507307837.
46. Doidge JC, Higgins DJ, Delfabbro P, Segal L. Risk factors for child maltreatment in an Australian population-based birth cohort. *Child Abuse Negl*. 2017 Feb;64:47–60. doi: 10.1016/j.chiabu.2016.12.002.
47. Teicher MH, Samson JA. Childhood maltreatment and psychopathology: A case for ecophenotypic variants as clinically and neurobiologically distinct subtypes. *Am J Psychiatry*. 2013 Oct;170(10):1114–33. doi: 10.1176/appi.ajp.2013.12070957.
48. Forkey H, Szilagyi M, Kelly ET, Duffee J; council on foster care, adoption, and kinship care, council on community pediatrics, council on child abuse and neglect, committee on psychosocial aspects of child and family health. *Trauma-Informed Care*. *Pediatrics*. 2021 Aug;148(2):e2021052580. doi: 10.1542/peds.2021-052580.
49. Duffee J, Szilagyi M, Forkey H, Kelly ET; council on community pediatrics, council on foster care, adoption, and kinship care, council on child abuse and neglect, committee on psychosocial aspects of child and family health. *Trauma-Informed Care in Child Health Systems*. *Pediatrics*. 2021 Aug;148(2):e2021052579. doi: 10.1542/peds.2021-052579.
50. Oral R, Ramirez M, Coohy C, et al. Adverse childhood experiences and trauma informed care: the future of health care. *Pediatr Res*. 2016 Jan;79(1-2):227–33. doi: 10.1038/pr.2015.197.

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